

RT504F

TECHNICAL DATA BULLETIN

GRADE: RT504F

NEMA LI 1-1998 GRADE: G-3

U.L. LISTED: N

DESCRIPTION: Grade RT504F is composed of a fine weave glass fabric combined with a phenolic resin system. It has excellent heat and chemical resistance in basic systems. It has good physical strength and high impact resistance. The use of a fine weave fabric is to provide better finish to the final part. Typical applications include structural parts and can be substituted for G-7 in certain applications. RT504R also complies with ANSI/NEMA IM 60000-2021 Grade G-3 and MIL-I-24768/18 GPG.

TYPICAL PROPERTIES

	UNITS	VALUE		
		Specimen Tested (ID x OD)		
			0.75" x 1.00"	
PHYSICAL PROPERTIES				
Specific Gravity (ASTM D792)	-		1.78	
Rockwell Hardness (ASTM D785)	M Scale		120	
Moisture Absorption Condition D ₁ -24/23 (ASTM D570)	%		0.20	
Tensile Strength Condition A (ASTM D638)	psi		45,000	
Compressive Strength Condition A (ASTM D695)	psi		43,000	
Compressive Modulus Condition A (ASTM D695)	kpsi		1,115	

RT504F - TYPICAL PROPERTIES (continued)

	UNITS	VALUE		
		Specimen Tested (ID x OD)		
			0.75" x 1.00"	
THERMAL PROPERTIES				
Temperature Index ¹ Electrical / Mechanical	°C		180 / 160	
Flammability Rating (UL Bulletin 94) Condition A	Class		HB	
ELECTRICAL PROPERTIES				
Electric Strength (ASTM D149) Condition A	Volts/mil		420	
	Condition D-48/50	Volts/mil	400	

¹ NEMA LI-6: This temperature is a recommendation only, and based upon experience in various applications. The maximum operating temperature is dependent upon the application and should be investigated prior to use.

Although G-3 tubing is a recognized form by NEMA, ASTM and MIL-I-24768 standards, property requirements are undefined at this time. Phenolic/glass tubing is recognized by IEC 61212-3-1; grade PF-GC-21, which defines property requirements.

This data, while believed to be accurate and based on reliable analytical methods, is for informational purposes only. The terms and conditions of the agreement under which it is sold will govern any sales of this product. Data supplied above are "typical values"; not to be considered "specification values".

To assure the material's performance is adequate for a specific application; customers should verify, independent of Norplex-Micarta, performance characteristics of interest.

It is the responsibility of the users of this information to make sure that they have the latest version of this TDB, and are urged to contact Customer Service, or preferably our web site, www.norplex-micarta.com, to determine if information is the most current.

Specification writers: Contact Norplex-Micarta for specification values before submission.